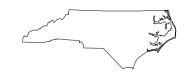
Statistical Brief



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Trends in Births to Mothers Age 35 and Older in North Carolina

by Nan Staggers

At an age when most women are thinking about becoming grandparents, some are becoming new mothers. Statistics show that many older women are now having their first, second, third, or higher order child. This delay in childbearing is due to factors such as education and careers. Also, having accomplished certain goals, older women may feel that they are better prepared to be parents. The desire to have healthy babies or to become a good parent has not changed among younger or older women, but economic and social issues have caused a change in the age of childbearing. Data collected from the 1998 birth certificates indicates that women age 35 and over accounted for 10 percent of all births in North Carolina. This is almost three times the percentage to women of this age group in 1978 (Table 1).

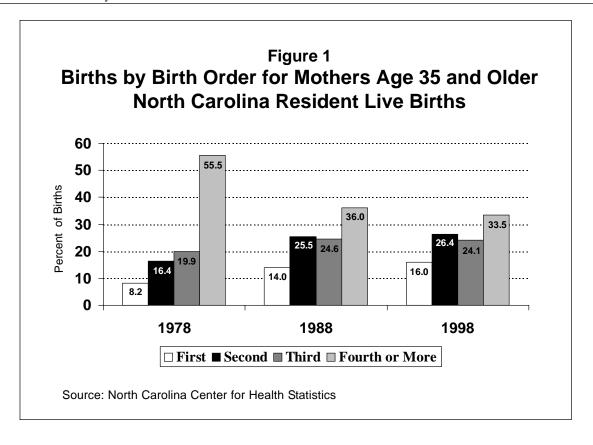
Sixteen percent of the births to older women in 1998 were first births (Figure 1). Fifty percent of the 1998 births were the second or third child for mothers in this age group. Fourth or higher order children accounted for 34 percent of all 1998 births. More than half (56%) of the births in 1978 were fourth or higher order. Having four or more children has become much less common. The percentage of births to older women that were first births doubled from 8 percent in 1978 to 16 percent in 1998.

Table 1				
Births by Age of Mother				
North Carolina Resident Live Births				

Number of Births by Year				
1978	1988	1998		
821	1.746	3,080		
		2,530		
467	905	1,930		
356	616	1,449		
237	454	1,034		
170	313	703		
126	161	435		
89	90	247		
51	59	134		
17	17	81		
16	11	28		
5	6	18		
1	1	12		
2	0	2		
0	0	0		
0	0	2		
2,981	5,649	11,685		
3.6	5.8	10.5		
	821 623 467 356 237 170 126 89 51 17 16 5 1 2 0 0	1978 1988 821 1,746 623 1,270 467 905 356 616 237 454 170 313 126 161 89 90 51 59 17 17 16 11 5 6 1 1 2 0 0 0 0 0 2,981 5,649		

Source: North Carolina Center for Health Statistics





Mothers age 35 and older have shown considerable improvement in their education and prenatal care, but not in birth weight. In 1978, only 31 percent of mothers age 35 and older had education beyond high school. Approximately 71 percent of mothers age 35 and older in 1998 had education beyond high school. Ninety percent of mothers in this age group began their prenatal care in the first trimester, compared to 75 percent in 1978. Low birth weight births, however, increased from 8.8 percent in 1978 to 10.2 percent in 1998 within this age group. This increase may be due substantially to an increase in multiple births.¹

Fertility is naturally lower among older women. More and more women are using fertility drugs to increase the chances of pregnancy. The use of these drugs increased substantially in the late 1970s. The goal is to fertilize more than one egg in the hope that one will survive. One result has been more multiple births. The recent climb in multiple births is attributed largely to older

women. The National Center for Health Statistics reported that the soaring popularity of fertility drugs combined with women waiting longer to have children explain the "unprecedented" increase in multiple births from 1980 to 1997.²

The birth rate for women ages 35-39 has increased considerably in North Carolina over the past two decades (Table 2). This rate nearly tripled from 1978 to 1998 from 13.8 to 32.7 per 1,000 females of ages 35-39. The largest jump occurred over the past ten years. The birth rate in the United States nearly doubled during the same period from 19.0 births to 37.4 births per 1,000 females in this age group. The birth rate in this age group in North Carolina is lower than the national average.

Large changes have also occurred in births to women ages 40-44. Childbearing at this age was once a relatively rare occurrence and often considered an accidental pregnancy. The birth rate for women ages 40-44 was 2.8 in both 1978 and 1988

Table 2
Birth Rates for Mothers Age 35 and Older
North Carolina and United States
1978, 1988 and 1998

	Ages 35-39		Ages 40-44		Ages 4	15-49
Year	North Carolina	United States	North Carolina	United States	North Carolina	United States
1978	13.8	19.0	2.8	3.9	0.2	0.2
1988	19.4	28.1	2.8	4.8	0.1	0.2
1998	32.7	37.4	5.3	7.3	0.2	0.4

Rates per 1,000 females of specified age groups Source: National Center for Health Statistics Reports

and then nearly doubled to 5.3 births per 1,000 females in 1998. For North Carolina women ages 45-49, the birth rate was about the same in 1998 as it was in 1978. With recent advances in fertility enhancing therapies, a few women over age 50 are now giving birth.³

With changing social and economic circumstances, many women are delaying child bearing until they are age 35 or older. Fertility enhancing therapy has allowed more women to get pregnant at older ages. Women of this age group are more likely to experience a difficult pregnancy. Some develop health problems, such as gestational diabetes and high blood pressure. With or without the use of fertility drugs, older women have a higher risk of having multiple births. Low birth weight, preterm birth, and birth defects⁴ are associated with multiple births. The trend toward older child-bearing is not likely to change in the near future. Special attention is needed to the health care needs of older pregnant women.

References

- 1. Meyer RE, Buescher PA, Surles KB. Multiple deliveries in North Carolina: effects on birth outcomes. *Maternal and Child Health Journal* 1999; 3:233-240.
- 2. Martin, JA, Park MM. Trends in twin and triplet births: 1980-97. *National Vital Statistics Reports*, Vol. 47, No. 24. Hyattsville, MD: National Center for Health Statistics, September 1999.
- 3. Births: final data for 1998. *National Vital Statistics Reports*, Vol. 48, No. 3. Hyattsville, MD: National Center for Health Statistics, March 28, 2000.
- 4. Layde PM, Erickson JD, Falek A, McCarthy BJ. Congenital malformations in twins. *America Journal of Human Genetics* 1980; 32:69-78

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Nan Staggers at (919) 715-4990 e-mail: Nan.Staggers@ncmail.net

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